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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,812	09/04/2003	R. Ashby Armistead	2705-307	8007
20575 7590 03/23/2007 MARGER JOHNSON & MCCOLLOM, P.C. 210 SW MORRISON STREET, SUITE 400 PORTLAND, OR 97204			EXAMINER HARRELL, ROBERT B	
			ART UNIT	PAPER NUMBER
			2142	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/23/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/655,812

Applicant(s)

ARMISTEAD ET AL.

Examiner

Robert B. Harrell

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>see attached Office Action</u> . |

Art Unit: 2142

1. Claims 7-24 are presented for examination.
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The claims are more directed to retrieving connection characteristic of a first communication link after ending the first communication link and before ending the second communication link.
3. The applicant should always use this period for response to thoroughly and very closely proof read and review the whole of the application for correct correlation between reference numerals in the textual portion of the Specification and Drawings along with any minor spelling errors, general typographical errors, accuracy, assurance of proper use for Trademarks TM, and other legal symbols ®, where required, and clarity of meaning in the Specification, Drawings, and specifically the claims (i.e., provide proper antecedent basis for "the" and "said" within each claim). Minor typographical errors could render a Patent unenforceable and so the applicant is strongly encouraged to aid in this endeavor.
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this action:

A person shall be entitled to a patent unless -

(e) the invention was described in — (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language;

5. Claims 7-24 are rejected under 35 U.S.C. 102 (e) as being anticipated by Drott et al. (United States Patent Number: 6,094,683).

6. Prior to addressing the grounds of the rejections below, should this application ever be the subject of public review by third parties not so versed with the technology (i.e., access to IFW through Public PAIR (as found on <http://portal.uspto.gov/external/portal/pair>)), this Office action will usually refer an applicant's attention to relevant and helpful elements, figures, and/or text upon which the Office action relies to support the position taken. Thus, the following citations are neither all-inclusive nor all-exclusive in nature *as the whole of the reference is cited* and relied upon in this action as part of the substantial evidence of record. Also, no temporal order was claimed for all the acts and/or all the functions.

Art Unit: 2142

7. The rejection, and grounds for rejection, under 35 U.S.C. 102(e) as presented in examiner's prior Office Actions mailed 13 October 2006 08 and May 2006 are hereby maintained and incorporated in this Office Action by reference.

8. The applicant argued in his 11 January 2007 response by stating in substance that

a) claim 7 recites the first switch means requests a connection by sending a set-up message means responsive to a request means from the originating means. This claim recites two elements not present in Drottat: a set-up message means and a request means. The examiner proposes that Drottat teaches these features in Figure 3 and column 2, lines 48-et seq. See Office Action paragraph 22. However, Figure 3 and the referenced portion of column 2 merely describe how data is transmitted over single and bundled links, thereby presuming that a communication link (206) or links (306 and 307) are already established. So, not only does this portion of Drottat not teach a set-up message means and a request means, there would be no reason for it to, since it is describing transmission of data over links that already exist. However, such is the establishment of a communication channel between two elements in a system in that one must request a connection and the other take the required actions to set up the connection. Drottat does teach such a set-up message means (e.g., see col. 2 (lines 48-et seq.)) and a request means per figure 2, figure 3, and column 2 (lines 48-et seq.) as part of the MAC headers. That is, the first switch means (124) requested a connection by sending a setup message (e.g., see figure 3 and col. 2 (line 48-et seq.)) to the network means (via 120 of figure 1) based on a request from an originating means (e.g., 102 of figure 1) and per the notification as covered in col. 7 (line 30-et seq.). Elements of a system do not start communicating without first negotiating a communication protocol between the two elements as indicated in col. 3 (line 32-et seq.);

b) claim 7 further recites server means having multiple device means, each device means being coupled to the second switch means through a corresponding transmission means. The examiner proposes that switch 126 is a second switch means, that the ports in switch 126 are server means, that the ports in switch 126 are multiple device means, and that wires (not shown in Drottat FIG. 1) are transmission means. See Office Action paragraph 22. There are many problems with this equivalence. First, it claims that the ports in switch 126 are both a server means and multiple device means. When an applicant uses different terms in a claim it is permissible to infer that he intended his choice of different terms to reflect a differentiation in the meaning of those terms. See *Bancorp Servs., L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 2004). "The use of [two] terms in close proximity in the same claim gives rise to an inference that a different meaning should be assigned to each. See *Ethicon Endo-Surgery Inc. v. U.S. Surgical Corp.*, 93 F.2d 1572, 1579 (Fed. Cir. 1996) (stating that if two terms described a single element, 'one would expect the claim to consistently refer to this element [with one or the other of the two terms], but not both, especially within the same clause')." *Id.* Claim 7 recites both a server means and multiple device means within the same clause, so the ports of switch 126 in Drottat cannot anticipate both of these elements. Second, the proposed equivalence identifies wires of Drottat as being equivalent to the recited transmission lines, but these wires, which connect each device means to the second switch means, are not shown or described anywhere in Drottat. The links 138 and 139 cannot be the recited transmission lines because they connect the ports of switch 126 to end point device 106, neither of which are a device means. Finally, there is no teaching in Drottat to suggest that the ports shown in FIG. 1 are somehow separate from the switch 126,

Art Unit: 2142

such that they could be classified as a separate server means. For at least the reasons identified above, claim 7 and its dependent claims, 8-19, are allowable over Drottar and the applicants request allowance. However, the ports of switch 126 (figure 1) in Drottar can perform the dual functions of both of these elements since the claim recites that the server means has multiple device means. Thus, as indicated in examiner Prior Office Actions, the server means was the sum of all ports (including their drive/software) that supported multi-link connection(s) with the terminating means (e.g., see figure 1 (106)), and these wires (links), which sum of all ports that constitutes the server also had multiple device(s) (e.g., any on of the port was a device) and which connected each device means to the second switch means. The links 138 and 139 were the recited transmission lines because they connected the ports of switch 126 to end point device 106 each of which having one or more port device means. Finally, there is a teaching in Drottar to suggest that the ports shown in FIG. 1 are separate from the switch 126, such that they could be classified as a separate server means since 126 had several ports as did the end point 106;

c) claims 8 and 9 contain routing means reserving time slots. FIG. 3 of Drottar does not show any timeslots or any other communications on the links that would require time slot allocation. However, Drottar does show timeslots or any other communications on the links that would require time slot allocation per figure 2 and figure 3. As an example, figure 3 shows packets being transmitted, and unless total chaos is to occur, time slots were reversed via a common communications channel for orderly packet transmissions with the network mean. Since the data bits were not transmitted all at the same instant in time, the bits were clocked in an orderly time slot fashion;

d) claims 10 and 15 contain blocking termination of a connection and set-up request means. Drottar does not teach that any communication requests are blocked. However, Drottar does teach blocking termination of a connection and set-up request means. Examiner reads "termination" in light of page 10 (lines 7-10) as making, or having, a connection. Thus, reading the claims as when a number of available timeslots not used for the multi-link connection with the originating means is less than or equal to the timeslots (i.e., when the number of free time slots is less than or equal to the timeslots) the server means reserves timeslots by blocking termination (do not make the connection) of a connection other than the multi-link connection with the originating means. Hence, Drottar taught blocking termination over all links not implemented in the multi-link bundling per the Abstract in which only those links used in the bundling are actually implemented while communication is not permitted over those links not involved in the bundling;

e) claim 12 contains the server means transmitting a message means to the routing means. Drottar does not teach a server means transmitting a message to fabric manager 120. However, Drottar does teach a server means transmitting a message by evidence that multiple links are bundled to form the higher bandwidth communications channel;

f) claim 14 contains a common channel signaling message sent between the routing means and the second switch means. Drottar does not teach that any messages are sent between fabric manager 120 and switch 12. However, Drottar does teach sending messages and indicated above with respect to the MAC headers, in order to establish (set up) the multi-link bundle;

g) claims 17 and 18 contains routing means integrated into the first or second switch means. FIG. 1 of Drottar shows the fabric manager 120 as separate from the switches 124 and 126 and does not teach or suggest anywhere else in its disclosure that they can be integrated together.

Art Unit: 2142

However, switches were routers and/or contained routers either in the form of hardware or software to route data over each link according to the data in the MAC headers indicated in col. 2 (lines 48-et seq.);

h) in claim 20, the claim recites receiving a set up message from a source client. Nothing in Drottat teaches receiving a set up message from a source client. The entire disclosure of Drottat assumes that a connection exists between both nodes at power-up, and the nodes begin using this connection immediately by sending idle characters to each other. See Drottat column 5, lines 24-34. Claim 20 further clarifies that the set up message requests a first communication link between the source client and a termination client. Given the teachings of Drottat referenced above (column 5, lines 24-34), there is no need for a source node in Drottat to request a first communication link because it is already communicating with a receiving node as soon as it powers-up. The examiner proposes that Drottat teaches this feature at column 2, line 48-et seq. See Office Action paragraph 18a. However, this portion of Drottat simply describes how packets of information are transmitted over a single link. See Drottat column 2, lines 48-49. Drottat says nothing about how this single link is established or that the establishment of the single link includes receiving a set up message from a source client, as recited in the claim. However, Drottat teaches receiving a set up message from a source client, as indicated above, in order to establish a first communication link because one is present in the Drottat. Since the link connection is present, those skilled in the art knew how to bring this single link up such that it was established;

i) claim 20 further recites detecting a request for a second communication link from the source client. The examiner proposes that Drottat teaches this feature at column 7, lines 20-30. See Office Action paragraph 18b. However, this section of Drottat describes how fabric manager 120 can reconfigure nodes in response either to polls to the nodes or interrupts sent by the nodes. The interrupts notify fabric manager 120 of network congestion. See Drottat column 7, lines 20-23. There is nothing in Drottat to suggest that an interrupt in response to network congestion is a request for a second communication link, as recited in claim 20. However, congestion, in Drottat, suggests an interruption in the communication thus requiring more bandwidth and hence the need for a second or more communication link to form the disclosed bundle's creation;

j) further regarding claim 23, the claim recites receiving a signaling channel message requesting connection on a transmission facility serving the terminating device. The examiner does not point to any specific teachings of Drottat that suggest this feature and despite a thorough analysis of Drottat, the applicants find nothing in Drottat that teaches receiving a signaling message requesting connection on a transmission facility serving a terminating device, as recited in the claim. However, Drottat teaches receiving a signaling message requesting connection on a transmission facility serving a terminating device as indicated above and in col. 7 (line 30-et seq.);

k) further regarding claim 24, the claim recites blocking connection requests for the second communication link on any transmission facility that does not directly serve the terminating device. As established above with respect to claim 20, Drottat does not teach receiving a request for a second communication link. Further, even if Drottat did teach receiving a request for a second communication link, it doesn't teach blocking such a request for any transmission facility that does not directly serve a terminating device. The examiner points to column 7, lines 31-54 of Drottat as teaching this feature, but this section of Drottat merely describes how fabric manager 120 manages a link failure. It says nothing about blocking a request for a communication link, as

Art Unit: 2142

recited in the claim. ***However***, as indicated above with respect to claims 10 and 15, Drottar taught blocking termination over all links not implemented in the multi-link bundling per the Abstract in which only those links used in the bundling are actually implemented while communication is not permitted over those links not involved in the bundling.

9. It is noted that while claim terminology is clear in light of the specification, the wording of certain phrases (i.e., "blocking termination of") could lead to confusion; and, thus the applicant may wish to draft the claims more in line with the applicant's arguments of record specifically for claim 7. Claims 20-24 are clearly covered in col. 7 (line 30-et seq.).

10. **A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) days from the data of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02, 710.02(b)).**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Harrell whose telephone number is (571) 272-3895. The examiner can normally be reached Monday thru Friday from 5:30 am to 2:00 pm and on weekends from 6:00 am to 12 noon Eastern Standard Time.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew T. Caldwell, can be reached on (571) 272-3868. The fax phone number for all papers is (703) 872-9306.

13. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.



ROBERT B. HARRELL
PRIMARY EXAMINER
GROUP 2142